ABSTRACT OF THE DISCLOSURE

An object of the present invention is to improve the reliability and the yield of production of semiconductor integrated circuit devices by filling copper in the inside of features having a high aspect ratio for forming multi-layer interconnections composed of a plurality of interconnection layers which are connected to one another and to a copper electroplating bath suitable therefor. In the present invention, when the features are filled with copper, the use of a copper electroplating bath with an addition of cyanine dyes, for example, indolium compounds allows the copper plating to proceed preferentially from the bottoms of the features.